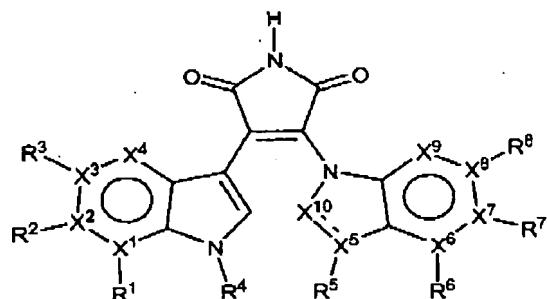


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JUN 27 2007

Amendments to the Claims:**This listing of claims replaces all prior versions of claims in the application**

1-30 (cancelled)

31. (currently amended) A compound represented by the following formula:

or a pharmaceutically acceptable salt thereof

wherein:

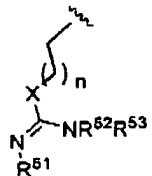
 $X^1 - X^3$ are independently C- or N; ~~X^4 is CH- or N, wherein not more than two of $X^1 - X^4$ is N;~~ $X^6 - X^8$ are independently C- or N; ~~X^9 is CH or N, wherein not more than two of $X^6 - X^9$ is N;~~ ~~X^5 is N, R^5 is a lone pair, and X^{10} is CH, when the bond between X^5 and X^{10} is a double bond; or~~ ~~X^5 is CH, R^5 is H, and X^{10} is CH₂, when the bond between X^5 and X^{10} is a single bond; or~~ ~~X^5 is C, R^5 is defined below, and X^{10} is CH, when the bond between X^5 and X^{10} is a double bond;~~ ~~$R^4 - R^3$ and $R^6 - R^8$ represent a lone pair or O when each respective $X^4 - X^3$ and $X^6 - X^8$ is N; or~~

when $X^1 - X^3$ or $X^6 - X^8$ is C, each respective $R^1 - R^3$ and $R^6 - R^8$ is independently selected from the group consisting of:

- a) H, substituted or unsubstituted C(1-8) alkyl, halogen, azido, cyano, nitro, or $NR^{21}R^{22}$, wherein R^{21} represents H or C(1-8) alkyl, and R^{22} represents H, substituted or unsubstituted C(1-8) alkylcarbonyl, substituted or unsubstituted arylcarbonyl, heterocycle, substituted or unsubstituted heteroarylcarbonyl, substituted or unsubstituted C(1-8) alkylaminocarbonyl, substituted or unsubstituted arylaminocarbonyl;
- b) OR^{23} , wherein R^{23} is H, substituted or unsubstituted alkylcarbonyl, substituted or unsubstituted arylcarbonyl;
- c) SR^{23} , wherein R^{23} is defined as in b);
- d) $O(CH_2)_j-R^{24}$, $O(CH_2)_j-O-R^{24}$, or $O(CH_2)_j-S-R^{24}$, wherein j is an integer from 1 to 8, and R^{24} is selected from the group consisting of H, substituted or unsubstituted C(1-8) alkyl, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl;
- e) $S(CH_2)_jR^{24}$, $S(CH_2)_j-O-R^{24}$, or $S(CH_2)_j-S-R^{24}$, wherein j and R^{24} are defined as in d);
- f) $C\equiv C-R^{25}$, $C\equiv C-OR^{25}$, or $C\equiv C-CO_2R^{25}$, wherein R^{25} is H, substituted or unsubstituted C(1-8) alkyl, aryl, substituted aryl, heteroaryl, or substituted heteroaryl;
- g) $CH=CH-R^{25}$, $CH=CH-OR^{25}$, or $CH=CH-CO_2R^{25}$, having a stereochemistry of E or Z, and R^{25} is defined as in f);
- h) $C\equiv C-NR^{25}R^{26}$ or $C\equiv CCONR^{25}R^{26}$, wherein R^{25} is defined as in f), and R^{26} is defined as R^{25} , and R^{25} and R^{26} are selected independently;
- i) $CH=CH-NR^{25}R^{26}$ or $CH=CHCONR^{25}R^{26}$, having a stereochemistry of E or Z, wherein R^{25} and R^{26} are independently defined as in h);
- j) $(CH_2)_kR^{25}$, $(CH_2)_k-COOR^{25}$, or $(CH_2)_k-OR^{25}$, wherein k is an integer from 2 to 6 and R^{25} is defined as in f);
- k) $(CH_2)_kNR^{25}R^{26}$, $(CH_2)_kCONR^{25}R^{26}$, wherein R^{25} and R^{26} are selected independently, and R^{25} and R^{26} are defined as R^{25} in f); and
- l) CH_2XR^{27} , wherein X is O or S and R^{27} is H, substituted or unsubstituted C(1-8) alkyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl;

R^4 is selected from the group consisting of:

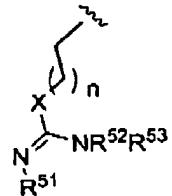
- m) H, substituted or unsubstituted C(1-8) alkyl; and
- n)



wherein $X=O$, S , or NH , $n=1$ to 4; and wherein R^{51} is H; R^{52} and R^{53} are independently chosen from the group consisting of H, substituted or unsubstituted C(1-8)alkyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, or R^{51} and R^{52} are combined to form a heteroalkyl, substituted heteroalkyl, heteroaryl, or substituted heteroaryl ring system;

R^5 is selected from the group consisting of:

- e) a lone pair when X^5 is N; or
- when X^5 is C, R^5 is selected from the group consisting of:
- p) H, substituted and unsubstituted C(1-8) alkyl; and
- q)



wherein $X=O$, S , or NH , $n=1$ to 4; and wherein R^{51} is H; R^{52} and R^{53} are independently chosen from the group consisting of H, substituted or unsubstituted C(1-8) alkyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, or R^{51} and R^{52} are combined to form a heteroalkyl, substituted heteroalkyl, heteroaryl, or substituted heteroaryl ring system; or

wherein when R^4 - R^3 and R^5 - R^8 are H, and R^4 is H or CH_3 , then at least one of X^1 - X^9 represents a ring member other than carbon.

32. (currently amended) A compound, according to claim 31, in which X^1 - X^3 are independently C.

33. (currently amended) A compound, according to claim 31, in which X^4 is CH.

34. (currently amended) A compound, according to claim 31, in which X^6 - X^8 are independently C.

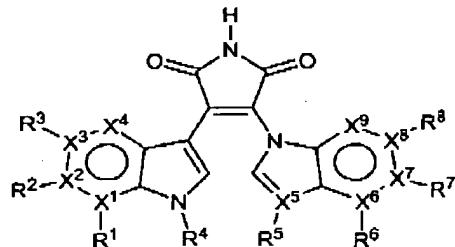
35. (currently amended) A compound, according to claim 31, in which X^9 is CH or N.

36. (currently amended) A compound, according to claim 31, in which X^5 is C, X^{10} is CH and the bond between X^5 and X^{10} is a double bond.

37. (withdrawn) A compound, according to claim 31, in which X^5 is N, R^5 is a lone pair, X^{10} is CH and the bond between X^5 and X^{10} is a double bond.

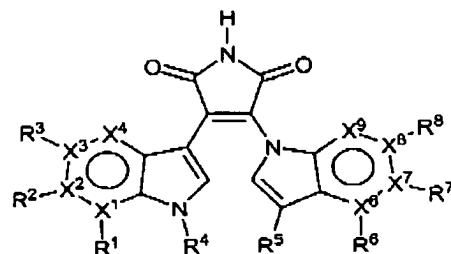
38. (currently amended) A compound, according to claim 31, in which X^5 is CH, R^5 is H, X^{10} is CH_2 and the bond between X^5 and X^{10} is a single bond.

39. (currently amended) A compound having the following formula:



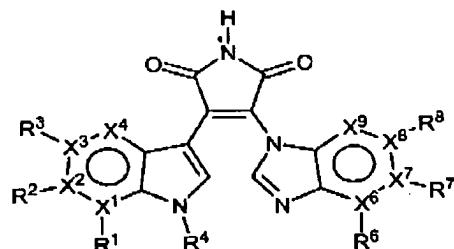
wherein X^5 is C or N, and X^1 - X^3 , X^4 , X^6 - X^8 , R^1 - R^3 , R^4 , R^5 and R^6 - R^8 are as defined in claim 31.

40 [[10]]. (currently amended) A compound having the following formula:



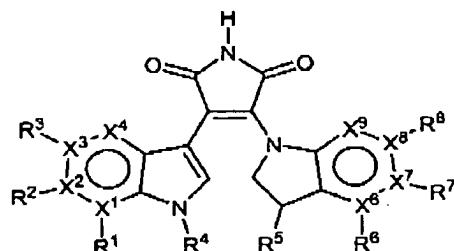
wherein X^1 - X^3 , X^4 , X^6 - X^8 , R^1 - R^3 , R^4 , R^5 and R^6 - R^8 are as defined in claim 31.

41[[11]]. (withdrawn) A compound having the following formula:



wherein X^1 - X^3 , X^4 , X^6 - X^8 , R^1 - R^3 , R^4 , R^5 and R^6 - R^8 are as defined in claim 31.

42[[12]]. (currently amended) A compound having the following formula:



wherein X^1 - X^3 , X^4 , X^6 - X^8 , R^1 - R^3 , R^4 , R^5 and R^6 - R^8 are as defined in claim 31.

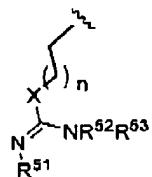
43[[13]]. (currently amended) A compound, according to claim 31, in which when X^1 - X^3 or X^6 - X^8 is C, each respective R^1 - R^3 and R^6 - R^8 is independently selected from the group consisting of:

- H, halogen;
- OR^{23} , wherein R^{23} is H, substituted or unsubstituted alkylcarbonyl, substituted or unsubstituted arylcarbonyl; and
- $O(CH_2)_j-R^{24}$, $O(CH_2)_j-O-R^{24}$, or $O(CH_2)_j-S-R^{24}$, wherein j is an integer from 1 to 8, and R^{24} is selected from the group consisting of H, substituted or

unsubstituted C(1-8) alkyl, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl.

44[[14]]. (currently amended) A compound, according to claim 31, in which R⁴ is selected from the group consisting of:

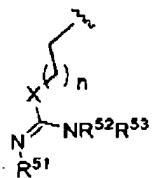
- m) H, substituted or unsubstituted C(1-8) alkyl; and
- n)



wherein X=O, S, or NH, n=2; and wherein R⁵¹ is H; R⁵² and R⁵³ are independently chosen from the group consisting of H, substituted or unsubstituted C(1-8)alkyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, or R⁵¹ and R⁵² are combined to form a heteroalkyl, substituted heteroalkyl, heteroaryl, or substituted heteroaryl ring system.

45[[15]]. (currently amended) A compound, according to claim 44[[14]], in which R⁴ is selected from the group consisting of:

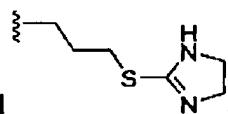
- m) H, substituted or unsubstituted C(1-8) alkyl; and
- n)



wherein X=S, n=2; and wherein R⁵¹ is H; R⁵² and R⁵³ are both H, or R⁵¹ and R⁵² are combined to form a heteroaryl ring system.

46[[16]]. (currently amended) A compound, according to claim 45[[15]], in which R⁴ is selected from the group consisting of: H, methyl, CH₂CH₂CH₂OH,

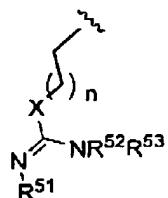
CH₂CH₂CH₂NH₂, CH₂CH₂CH₂N₃, CH₂CH₂CH₂SC(=NH)NH₂ and



47[[17]]. (withdrawn) A compound, according to claim 31, in which X^5 is N and R^5 is a lone pair.

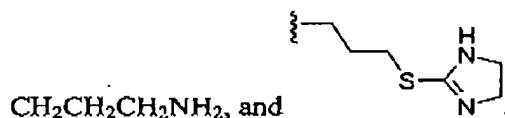
48[[18]]. (currently amended) A compound, according to claim 31, in which X^5 is C or CH, and R^5 is selected from the group consisting of:

- p) H, substituted and unsubstituted C(1-8) alkyl; and
- q)

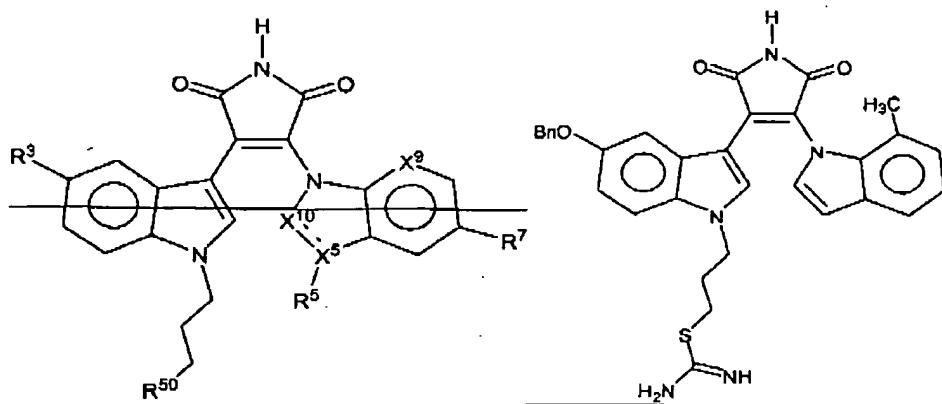


wherein $X=S$, $n=2$; and wherein R^{51} is H; R^{52} and R^{53} are independently chosen from the group consisting of H, substituted or unsubstituted C(1-8) alkyl, aryl, substituted aryl, heteroaryl, substituted heteroaryl, or R^{51} and R^{52} are combined to form a heteroalkyl, substituted heteroalkyl, heteroaryl, or substituted heteroaryl ring system.

49[[19]]. (currently amended) A compound, according to claim 48[[18]], in which X^5 is C or CH, and R^5 is selected from the group consisting of H, methyl, $CH_2CH_2CH_2OH$, $CH_2CH_2CH_2SC(=NH)NH_2$, $CH_2CH_2CH_2N(CH_3)_2$, $CH_2CH_2CH_2N_3$,



50[[20]]. (currently amended) A compound, according to the following formula

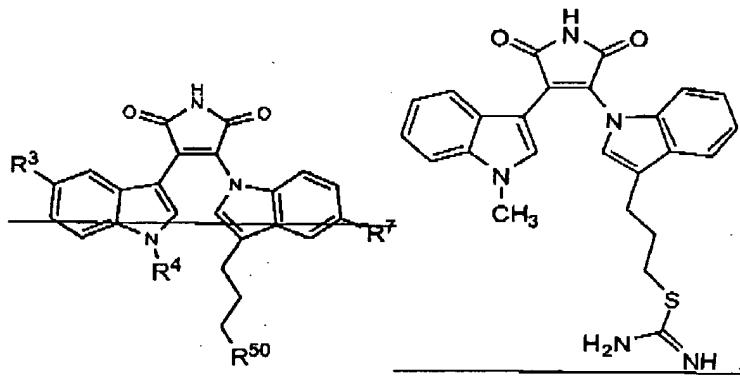


selected from the group consisting of:

Cpd.	Bond between X ⁵ /X ¹⁰	R ³	R ⁵⁰	R ⁷	X ⁵ /R ⁵	X ⁹	X ¹⁰
121	Double	H	-OH	H	CH	CH	CH
124	Double	BnO	-OH	H	CH	CH	CH
125	Double	H	-OH	H	CMe	CH	CH
126	Double	H	-OH	BnO	CH	CH	CH
127	Double	H	-OH	H	CH	CH	CMe
128	Double	H	-OH	H	N	CH	CH
129	Double	BnO	-OH	H	CMe	CH	CH
130	Double	H	-OH	H	CH	N	CH
131	Double	BnO	-OH	H	CH	CH	CMe
132	Double	H	-OH	F	CH	CH	CH
133	Double	H	-N(CH ₃) ₂	H	CH	CH	CH
136	Double	BnO	-N(CH ₃) ₂	H	CH	CH	CH
137	Double	H	-N(CH ₃) ₂	H	CMe	CH	CH
138	Double	H	-N(CH ₃) ₂	BnO	CH	CH	CH
139	Double	H	-N(CH ₃) ₂	H	CH	CH	CMe
140	Double	H	-N(CH ₃) ₂	H	N	CH	CH
141	Double	BnO	-N(CH ₃) ₂	H	CMe	CH	CH
142	Double	H	-N(CH ₃) ₂	H	CH	N	CH
143	Double	H	-SC(=NH)NH ₂	H	CH	CH	CH
146	Double	H	-SC(=NH)NH ₂	H	CMe	CH	CH
147	Double	H	-SC(=NH)NH ₂	BnO	CH	CH	CH
148	Double	BnO	-SC(=NH)NH ₂	H	CH	CH	CH
149	Double	BnO	-SC(=NH)NH ₂	H	CH	CMe	CH
150	Double	BnO	-SC(=NH)NH ₂	H	CH	CH	CMe
151	Double	H	-SC(=NH)NH ₂	H	CH	CH	CMe
152	Double	H	-SC(=NH)NH ₂	H	CH	N	CH
153	Double	MeO	-SC(=NH)NH ₂	H	CH	CH	CH
154	Double	F	-SC(=NH)NH ₂	H	CH	CH	CH
155	Double	H	-SC(=NH)NH ₂	F	CH	CH	CH

Cpd.	Bond between X^5/X^{10}	R^3	R^{50}	R^7	X^5/R^6	X^8	X^{10}
156	Double	H		H	CH	CH	CH
159	Single	H	-SC(=NH)NH ₂	H	CH ₂	CH	CH ₂
160	Double	OC ₆ H ₄ S Ph	-SC(=NH)NH ₂	H	CH	CH	CH
161	Double	H	-N ₃	H	CH	CH	CH
162	Double	H	-NH ₂	H	CH	CH	CH

51[[21]]. (currently amended) A compound according to the following formula:



selected from the group consisting of:

Example	R^3	R^{50}	R^7	R^4
163	H	OH	H	H
164	H	OH	H	Me
165	BaO	OH	H	H
166	H	SC(=NH)NH ₂	H	H
167	H	SC(=NH)NH ₂	H	Me
168	BaO	SC(=NH)NH ₂	H	Me
169	H	N(CH ₃) ₂	H	Me
170	H		H	Me
171	H	N ₃	H	Me
172	H	NH ₂	H	Me

52[[22]]. (currently amended) A composition comprising a compound, according to claim 31, in combination with carrier.

53[[23]]. (withdrawn) The composition, according to claim 52[[22]], further including a chemotherapeutic agent.

54[[24]]. (withdrawn) The composition, according to claim 52[[22]], further including a cytokine.

55[[25]]. (withdrawn) The composition, according to claim 52[[22]], further including anti-sense oligonucleotides.

56[[26]]. (withdrawn) A method of treating an inflammatory disorder, the method comprising: administering to a subject in need therof an effective amount of a compound or a composition, according to claim 31 or 52[[22]], so as to treat the disorder.

57[[27]]. (withdrawn) A method of treating cancer, the method comprising: administering to a subject in need thereof an effective amount of a compound or a composition, according to claim 31 or 52[[22]], so as to treat the cancer.

58[[28]]. (withdrawn) A method of treating a cell proliferative disorder, the method comprising: administering to a subject in need therof an effective amount of a compound or a composition, according to claim 31 or 52[[22]], so as to treat the disorder.

59[[29]]. (withdrawn) A method of treating cancer, the method comprising: administering to a subject in need thereof an effective amount of a compound or a composition, according to claim 31 or 52[[22]], in combination with another chemotherapeutic agent.

60[[30]]. (withdrawn) Use of a compound or a composition, according to claim 31 or 52[[22]], so as to induce apoptosis in Jurkat cells.

61[[31]]. (withdrawn) Use of a compound or a composition, according to claim 31 or 52[[22]], so as to induce apoptosis in cancer cell lines.

62[[32]]. (withdrawn) The use, according to claim 31, in which the cancer cell lines are prostate cancer and breast cancer cell lines

63[[33]]. (withdrawn) A method of treatment or prevention of a condition resulting from loss of growth and cellular differentiation control, the method comprising: administration to a subject in need thereof an effective amount of a compound or a composition, according to claim 31 or 52[[22]], so as to treat or prevent the condition.